

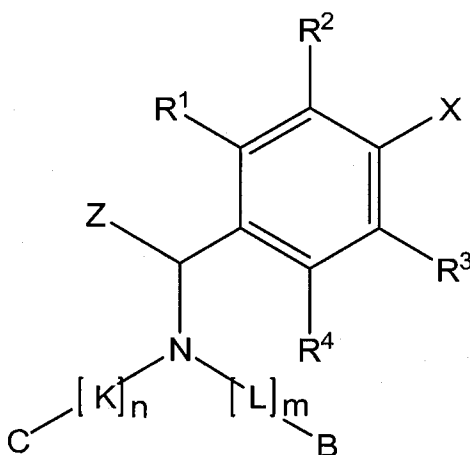
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-9. (Canceled)

10. (Currently Amended) A building-block according to the following formula:



wherein

B is one or more amino acids or peptides or is a reactive group for the attachment of one or more amino acids or peptides or is a reactive group conjugated to one or more amino acids or peptides, wherein the reactive group is an amino group, an amino protecting group or a protected amino group;

C is one or more labels or a functionality for the attachment of one or more labels wherein the functionality is selected from NH<sub>2</sub>, OH, NHNH<sub>2</sub>, NHOH, CHO, NH<sub>2</sub>, OH, SH, -NHNH<sub>2</sub>, -ONH<sub>2</sub>, CHO, or a protected form thereof; or, when K is absent, C is a label or protecting group directly connected to the central trivalent nitrogen atom;

K and L are independently from one another a linear or branched, substituted or unsubstituted alkyl chain with at least two C-atoms, whereby one or more non-neighboring C-

atoms are optionally ~~might be~~ substituted by O, NH, N-(C<sub>1</sub>-C<sub>6</sub>)Alkyl, N-(C<sub>5</sub>-C<sub>15</sub>)Aryl, S, a carbonyl group, ester group or an amide group and/or neighbouring C-atoms are optionally ~~might be~~ connected via a double or triple bond;

X is a residue according to formula III



with D being CH<sub>2</sub>, S, NH or O

R<sup>5</sup> being C<sub>1</sub>-C<sub>10</sub> alkyl

E being COOH, OH, SH, NCS, NCO, NH<sub>2</sub>, Cl, Br, I or the solid support;

~~functionality for attachment to a solid support or a functionality comprising the solid support;~~

Z is H, C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>5</sub>-C<sub>20</sub> aryl or C<sub>5</sub>-C<sub>20</sub> heteroaryl;

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> independently from one another are H, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>8</sub> alkoxy, C<sub>5</sub>-C<sub>18</sub> aryl or heteroaryl or C<sub>5</sub>-C<sub>18</sub> aryloxy or heteroaryloxy;

m, n are 0 or 1, whereby m+n is at least 1.

11. (Previously Presented) The building block according to claim 10, wherein B is an amino protecting group or a protected amino group.

12. (Previously Presented) The building block according to claim 11, wherein B is Mmt, Mtt, Alloc, ivDde, Dde, Fmoc, Bpoc, or an amino group protected by Mmt, Mtt, Alloc, ivDde, Dde, Fmoc, or Bpoc.

13. (Currently Amended) The building block according to claim 10, wherein C is selected from the NH<sub>2</sub>, OH, NHNH<sub>2</sub>, NHOH, CHO, NH<sub>2</sub>, OH, SH, NHNH<sub>2</sub>, ONH<sub>2</sub>, CHO, or a protected form thereof; ~~or, when K is absent, C is a protecting group directly connected to the central trivalent nitrogen atom.~~

14. (Currently Amended) The building block according to claim 13, wherein C is NH<sub>2</sub> or a protected form thereof, selected from the group consisting of STrt, SMmt, NBocNBoc<sub>2</sub>, and CH(OCH<sub>3</sub>)<sub>2</sub>.

15. (Previously Presented) The building block according to claim 10, wherein C is one or more labels selected from the group consisting of a fluorophore, a fluorophore/quench pair, a phosphorescent chemical residue, a luminescent chemical residue, a chemoluminescent chemical residue, a bioluminescent chemical residue, and biotin.

16. (Previously Presented) The building block according to claim 10, wherein the one or more labels are selected from the group consisting of 2,4-dinitrophenyl, 5-dimethylaminonaphthalenesulfonyl, biotinyl, and (7-methoxycoumarin-4-yl)acetyl, and 2-(5-sulfonaphthal-1-yl-amino)ethyl.

17. (Previously Presented) The building block according to claim 10, wherein  $m+n$  is 1.

18. (Previously Presented) The building block according to claim 10, wherein K and L are independently from one another  $C_2-C_8$ -alkyl or  $-(O-CH_2-CH_2-)_q-$  with  $q = 1$  to 20.

19. (Canceled)

20. (Currently Amended) The building block of claim 1 ~~claim 19~~, wherein  $R^1$  is MeO,  $R^2$ ,  $R^3$  are each H, Z is H,  $R^4$  is MeO or H, and X is O.

21. (Withdrawn-Currently Amended) A method for preparing C-terminally labeled peptides using the building block of claim 10, the method comprising

- a) optionally loading the building block on a solid support, wherein C is selected from a protected form of  $NH_2$ , OH, ~~SH~~,  $-NHNH_2$ ,  $-ONH_2$ , or CHO; or, when K is absent, C is a label or a protecting group directly connected to the central trivalent nitrogen atom;
- b) stepwise conjugating one or more amino acids to B of the building block attached to the solid support;
- c) removing the protecting group from C;
- d) attaching the label to the reactive group deprotected in step c);
- e) optionally deprotecting the amino protecting group of the N-terminal amino acid and attaching a label to said amino group; and

f) optionally cleaving the C-terminally labeled peptide from the solid support.

22. (Withdrawn) The method according to claim 21, wherein B is an amino protecting group or a protected amino group.

23. (Withdrawn) The method according to claim 21, wherein B is Mmt, Mtt, Alloc, ivDde, Dde, Fmoc, Bpoc, or an amino group protected by Mmt, Mtt, Alloc, ivDde, Dde, Fmoc, or Bpoc.

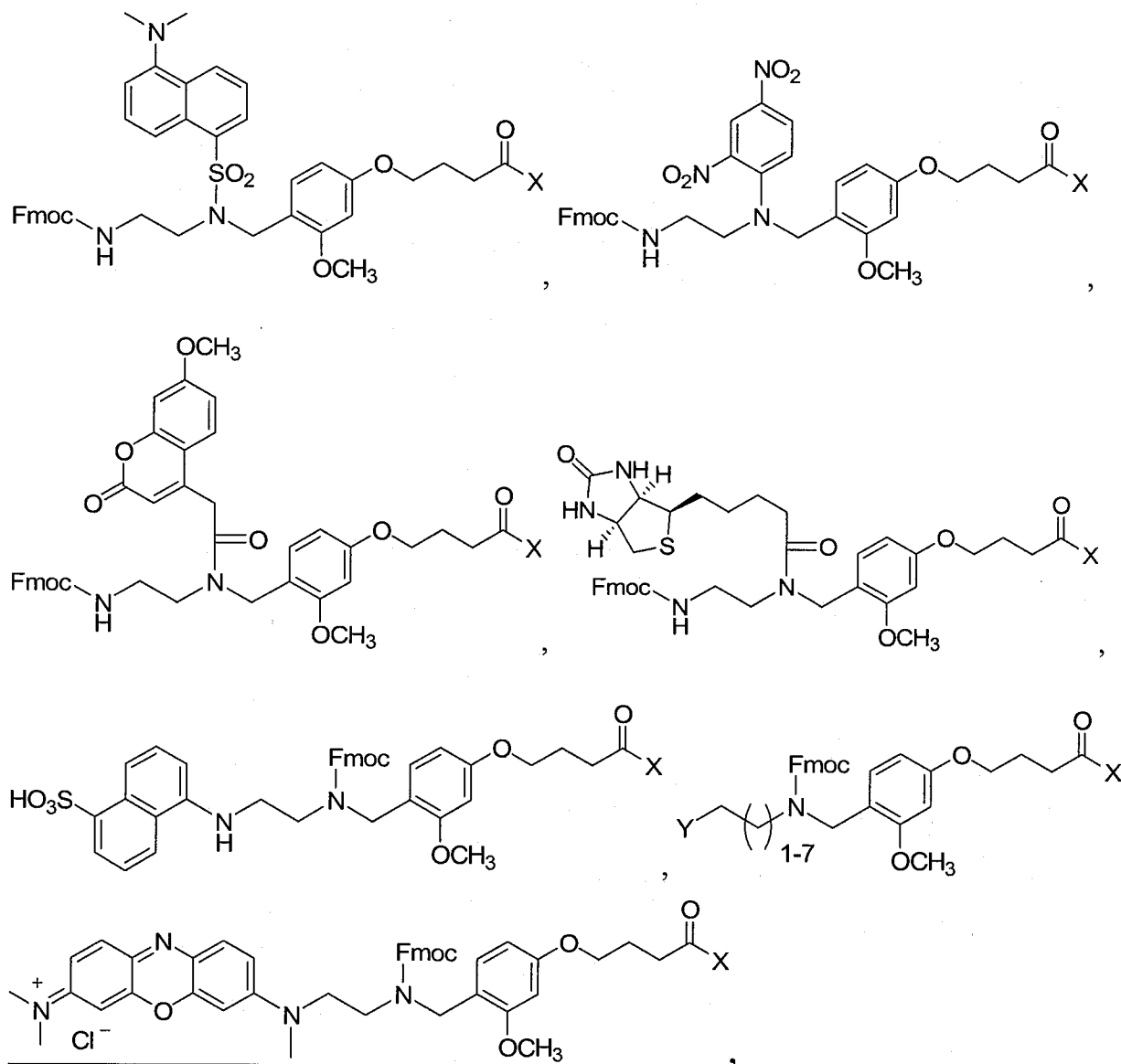
24. (Withdrawn) The method according to claim 21, wherein C is one or more labels selected from the group consisting of a fluorophore, a fluorophore/quench pair, a phosphorescent chemical residue, a luminescent chemical residue, a chemoluminescent chemical residue, a bioluminescent chemical residue, and biotin.

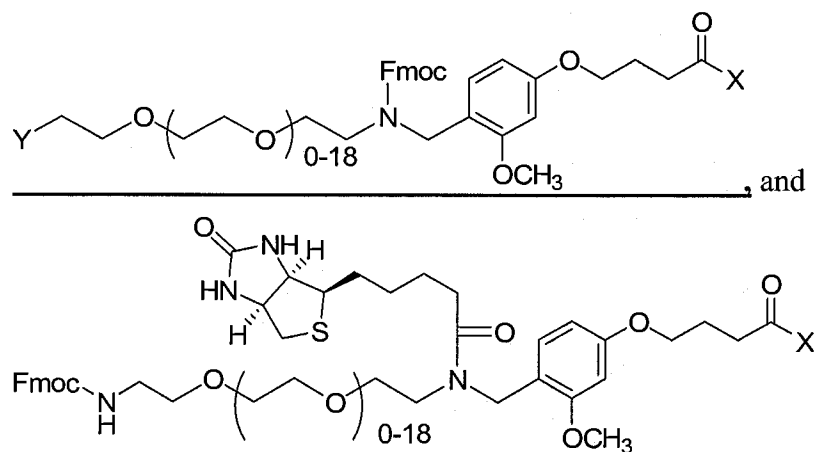
25. (Withdrawn) The method according to claim 21, wherein the one or more labels are selected from the group consisting of 2,4-dinitrophenyl, 5-dimethylaminonaphthalenesulfonyl, biotinyl, and (7-methoxycoumarin-4-yl)acetyl, and 2-(5-sulfonaphthal-1-yl-amino)ethyl.

26. (Withdrawn) A method for preparing C-terminally labeled peptides using the building block of claim 10, the method comprising

- a) optionally loading the building block on a solid support, wherein C is one or more labels;
- b) stepwise conjugating one or more amino acids to functionality B
- c) optionally deprotecting the amino protecting group of the N-terminal amino acid and attaching a label to said amino group; and
- d) optionally cleaving the C-terminally labeled peptide from the solid support.

27. (Currently Amended) A building block having a structure selected from the group consisting of





wherein

X is OH or an NH-functionalized insoluble or soluble solid support; and

Y is NHMtt, NHMmt, STrt, SMmt, NBocNBoc<sub>2</sub>, NBocNBOc<sub>2</sub>, ONBoc<sub>2</sub>, CH(OCH<sub>3</sub>)<sub>2</sub>.

28. (Previously Presented) The building block according to claim 27, wherein X is OH.

29. (Previously Presented) The building block according to claim 27, wherein X is aminomethyl polystyrene resin.